

Scratch Programming and Python Programming for kids(9-12 age)

Scratch Programming

Module-1 Introduction

- How to use Scratch
- Scratch interface
- Characters2
- Blocks and scripts

Module-2 Basic Block

- Moving characters
- Costumes
- Special effects
- Event blocks
- Loops

Module-3 (game project)

- The Hungry Shark 1/3 (octopus).3:22
- The Hungry Shark 2/3 (shark).5:14
- The Hungry Shark 3/3 (cheesy puffs).3:18
- Escape The Maze!3:24

Module-4 (Art project)

- Zig Zag Coloring 1/1.5:44
- Ice vs Fire.6:11

Module-5 Intermediate blocks

- Variables
- Operator blocks

- Strings and lists
- Coordinates

Module-6

- Dice Roll 1/1
- Cookie Clicker.

Module-7 Advance Block

- True or false
- Decision branching
- Sensing blocks
- Complex loops
- Broadcasting and receiving

Module-8 (game project)

- Angry Bat 1/3 (penguin).
- Angry Bat 2/3 (fish).5:2
- Angry Bat 3/3 (bat).6:31

Mini Python Syllabus

Basics

- What is Python
- print() and simple math

Variables & Input

- Store data (name, age)
- Take input from user

Conditions (1 week)

- if / else
- Make simple decisions

Loops

- for loop, while loop
- Repeat actions

Lists

- Store multiple items
- Basic list operations

Fun Graphics

- Use Turtle
- Draw shapes and designs